





**MUNICIPAL FIRE STATION**  
**CITY of LEON VALLEY**  
**6300 EL VERDE ROAD, LEON VALLEY, TEXAS 78238**

[illegible]

Revision: \_\_\_\_\_ Date: \_\_\_\_\_

Project No.: 12018

Checked By: \_\_\_\_\_ JC/JA

Designed By: \_\_\_\_\_ JC/JA

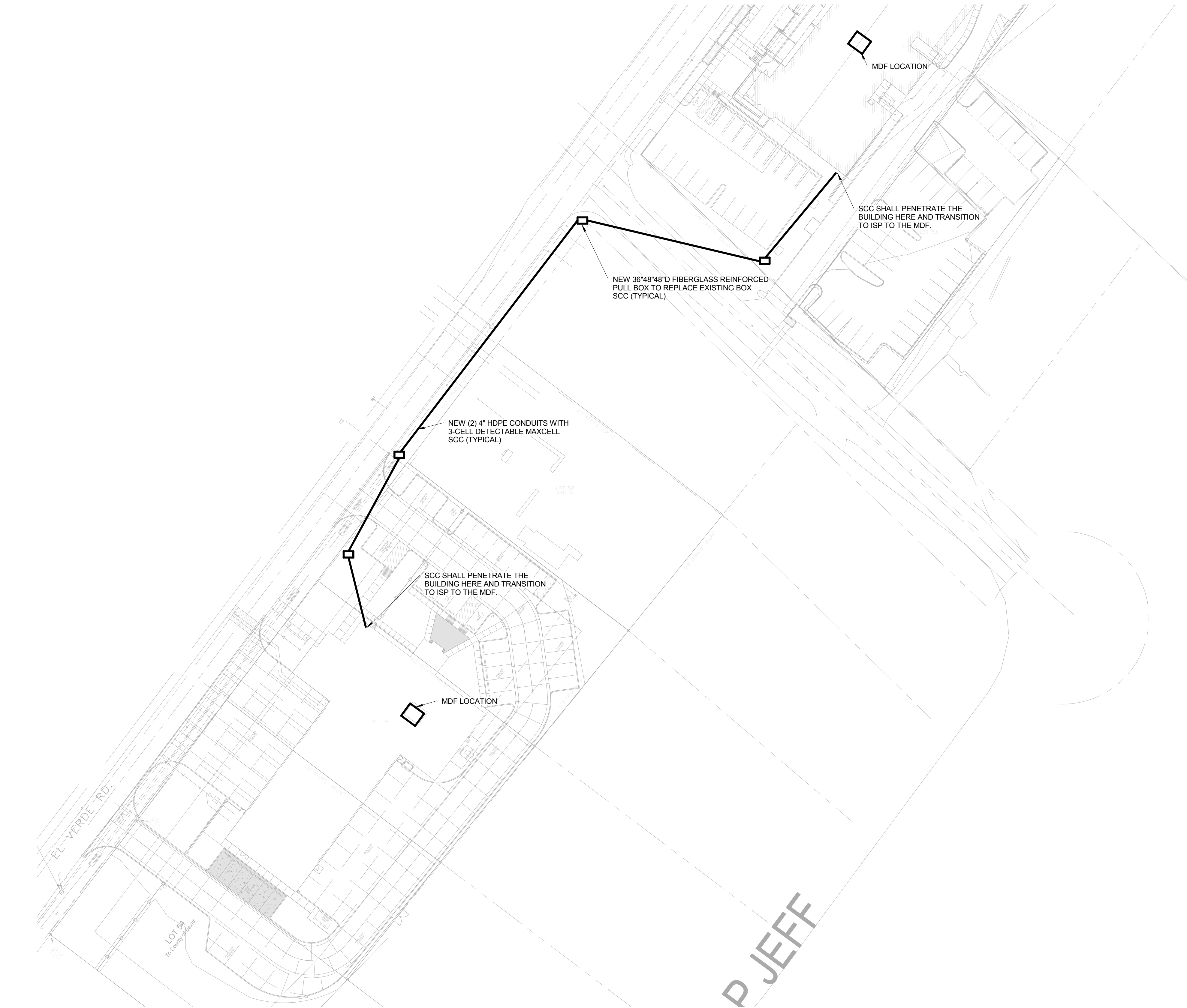
Drawn By: \_\_\_\_\_ AD

Scale: \_\_\_\_\_ 1" = 40'-0"

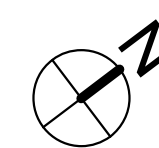
Date: 03.19.2014

## TECHNOLOGY - SITE PLAN

# T1.0



**1** SITE PLAN  
SCALE: 1" = 40'-0"







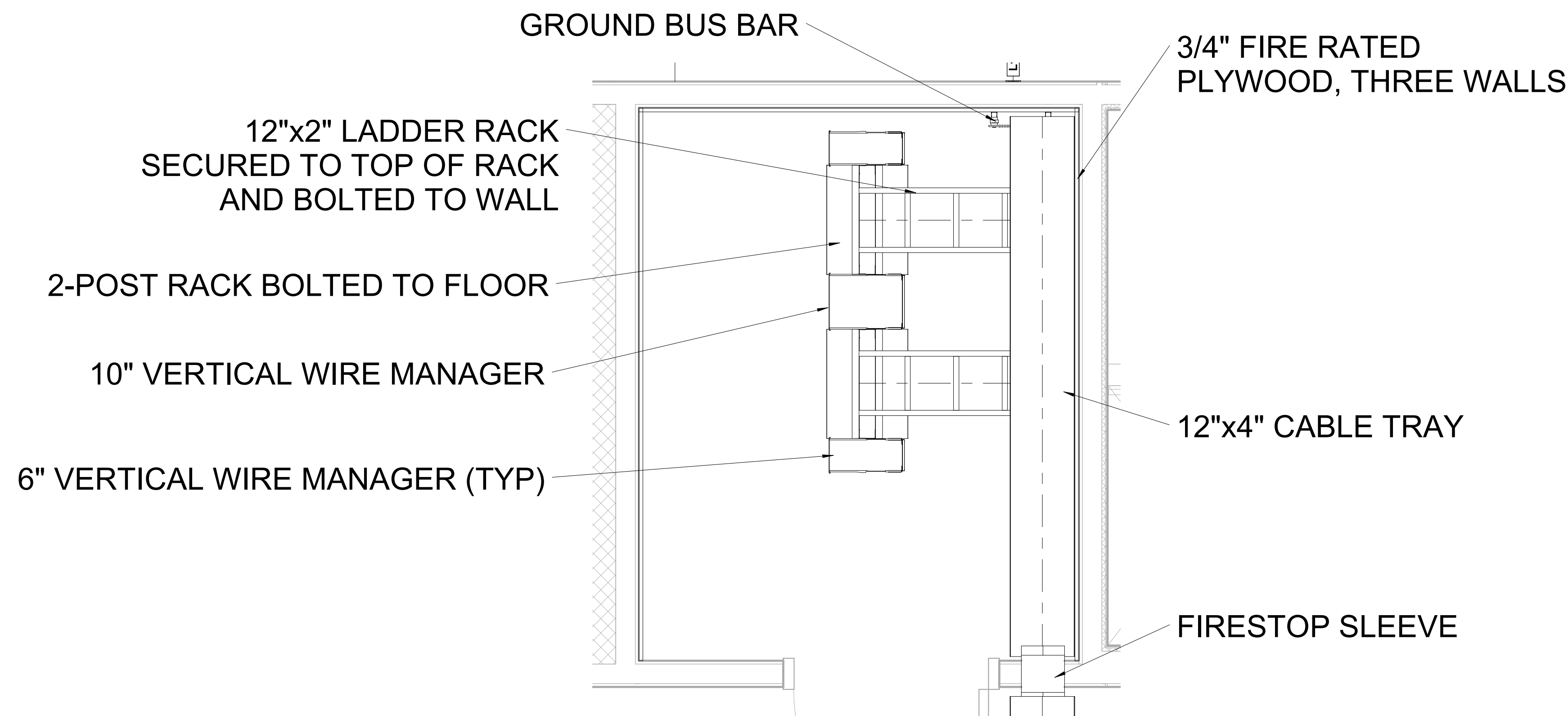
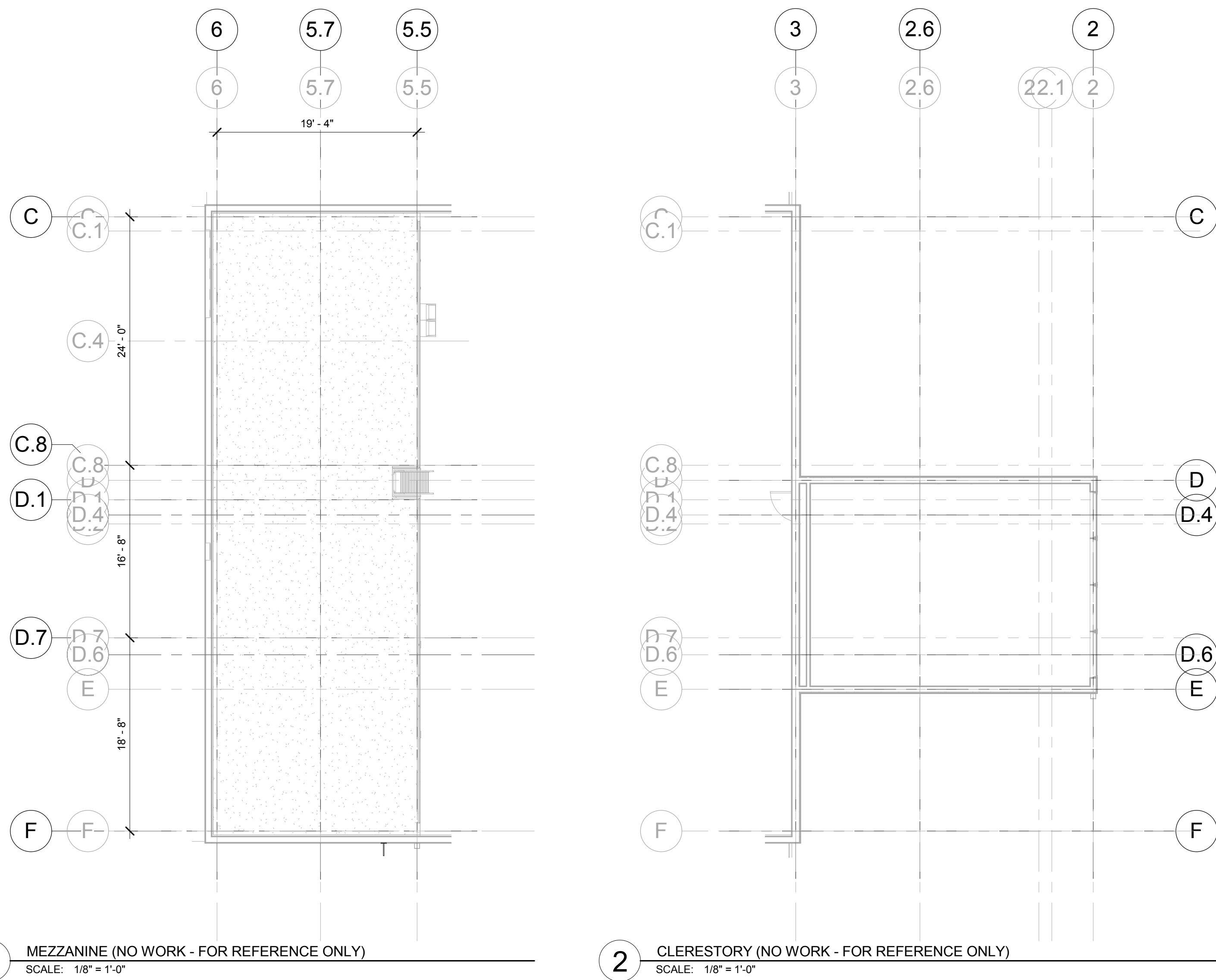
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Drawn By: \_\_\_\_\_ Author  
Scale: \_\_\_\_\_ As indicated  
Date: \_\_\_\_\_ 03.19.2014

TECHNOLOGY -  
TOWER PLAN AND  
ABOVE FLOOR  
PLANS

**T1.2**



3 IDF - ENLARGEMENT  
SCALE: 3/4" = 1'-0"

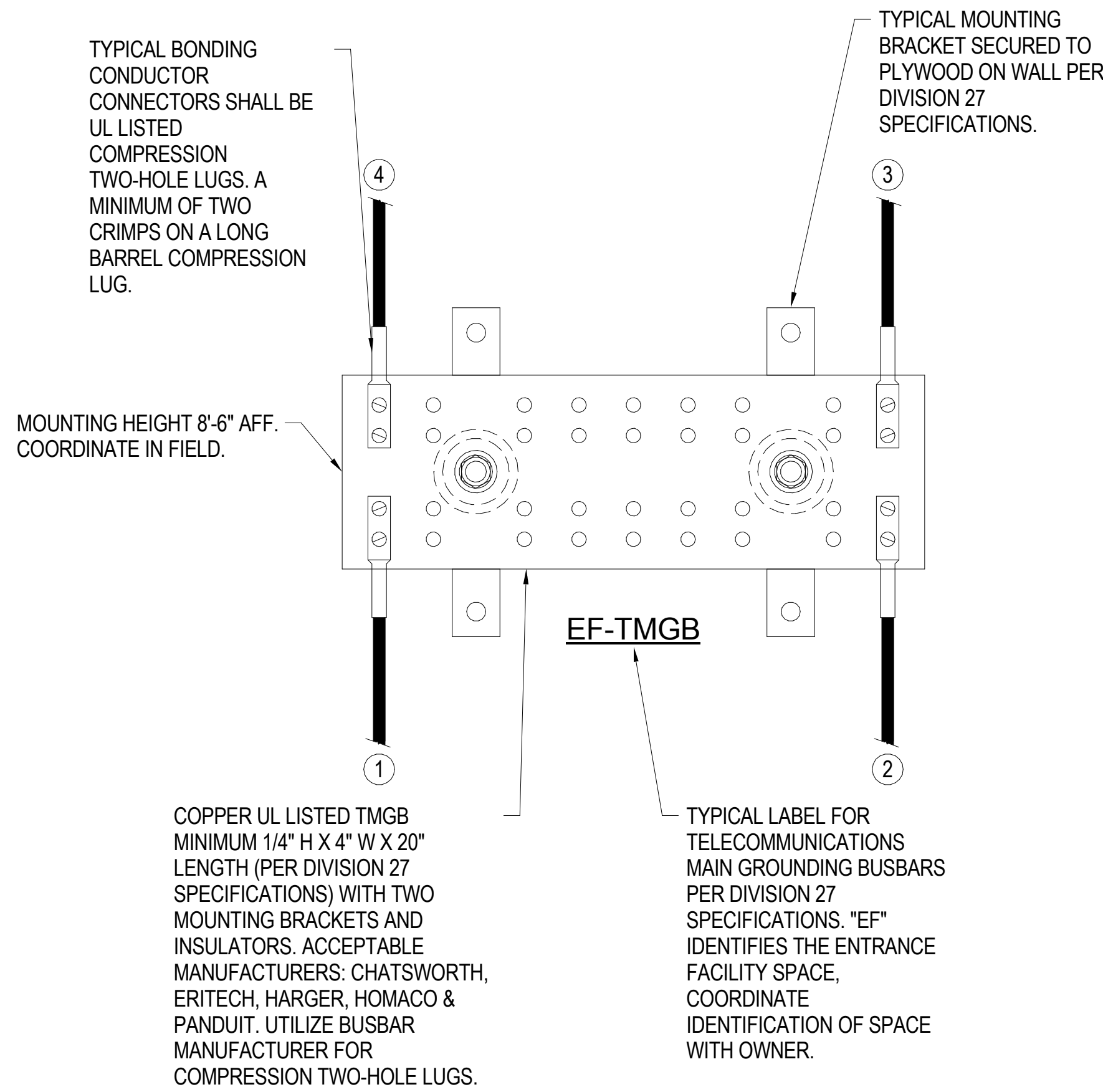


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**TECHNOLOGY -  
DETAILS**

**T5.1**



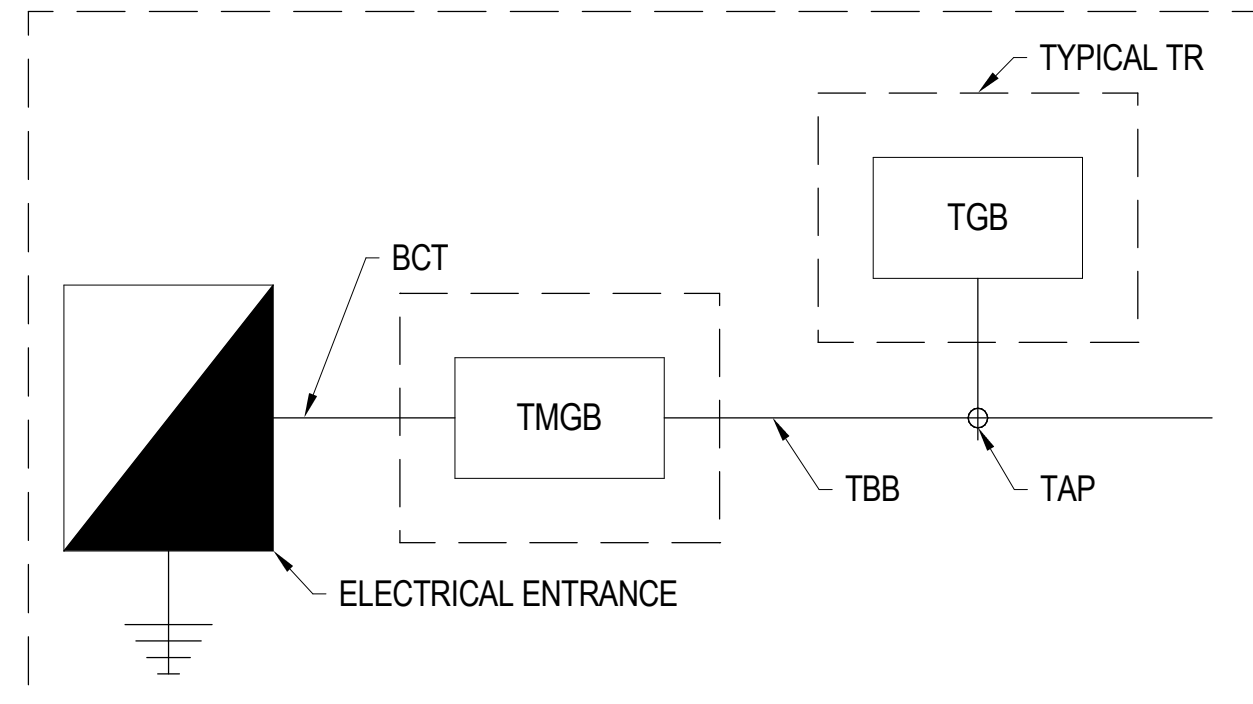
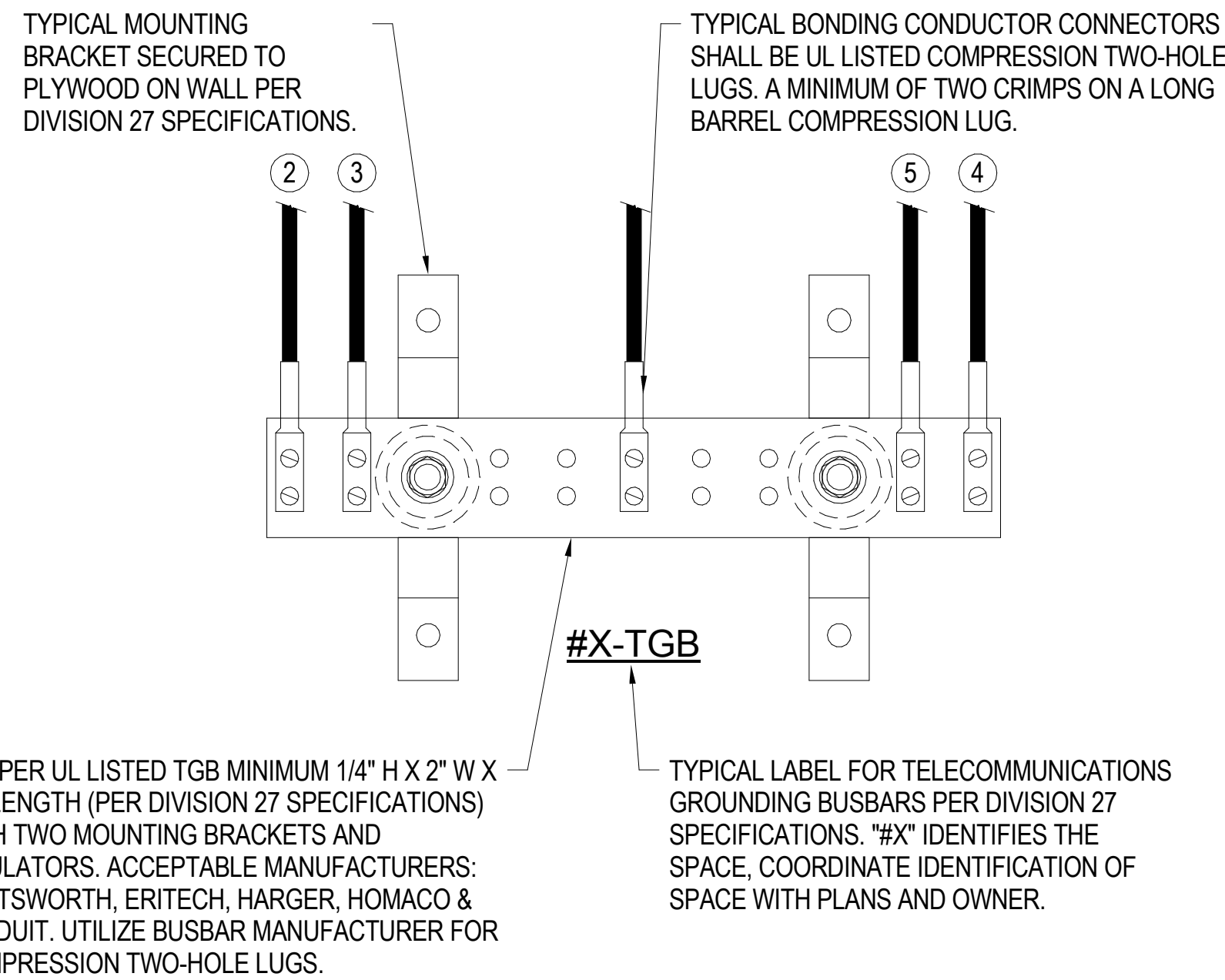
BONDING CONDUCTOR SIZING CHART	
LENGTH (FEET)	SIZE (AWG)
LESS THAN (<) 13'	# 6
14' - 20'	# 4
21' - 26'	# 3
27' - 33'	# 2
34' - 41'	# 1
42' - 52'	# 1/0
53' - 66'	# 2/0
GREATER THAN (>) 66'	# 3/0

**GROUNDING & BONDING GENERAL NOTES**

- ALL TELECOM GROUNDING WORK SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- REFER TO GROUNDING AND BONDING DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- BONDING CONDUCTORS SHALL BE #3/0 AWG COLOR GREEN INSULATED COPPER CONDUCTOR OR SIZED PER "BONDING CONDUCTOR SIZING CHART" (ANSI J-STD-607-B) IN PATHWAY.
- FASTENING BONDING CONNECTOR TWO -HOLE LUGS TO ALL BUSBARS SHALL BE CLEANED AND APPLY A COPPER ANTI-OXIDANT TO THE CONTACT AREA OF BOTH THE CONNECTOR LUG AND THE BUSBAR.
- BONDING CONDUCTORS AND BUSBARS SHALL BE LABELED, WITH IDENTIFICATION IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/TIA/EIA-606-B.
- BONDING CONDUCTORS SHALL BE LABELED WITH IDENTIFICATION LABEL NOTED BELOW AND SECURED WITH CABLE TIE TO EACH CONDUCTOR, (ANSI J-STD-607-B) "IF THIS CONNECTOR OR CABLE IS LOOSE OR MUST BE REMOVED, PLEASE CALL THE BUILDING TELECOMMUNICATIONS MANAGER".
  - THE TMGB AND THE NEAREST GROUNDING ELECTRODE.
  - THE TGB AND THE NEAREST GROUNDING ELECTRODE.
  - EACH TGB AND THE PATHWAY(S), RACK(S), CABINETS(S) AND APPLICABLE EQUIPMENT.

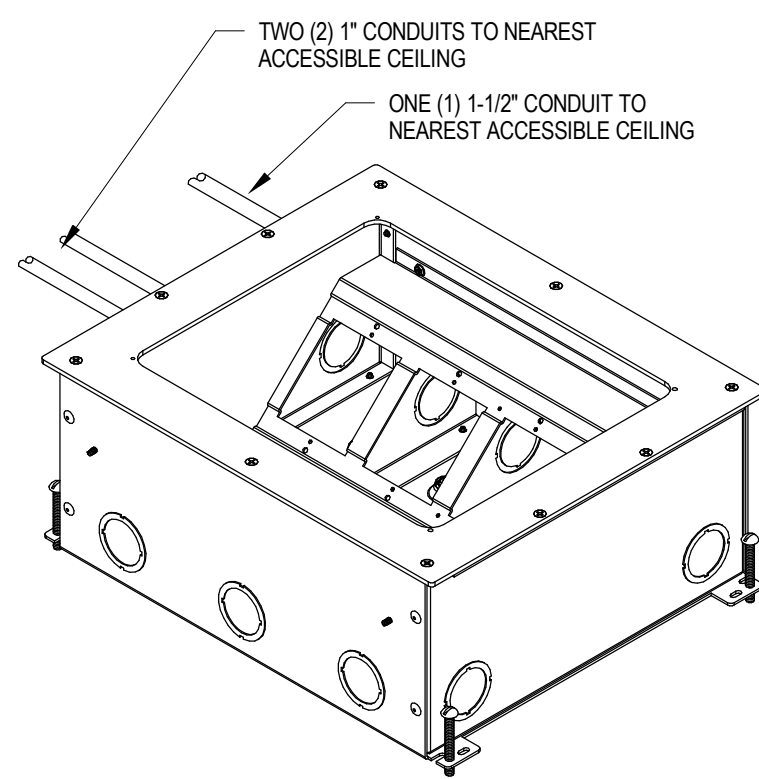
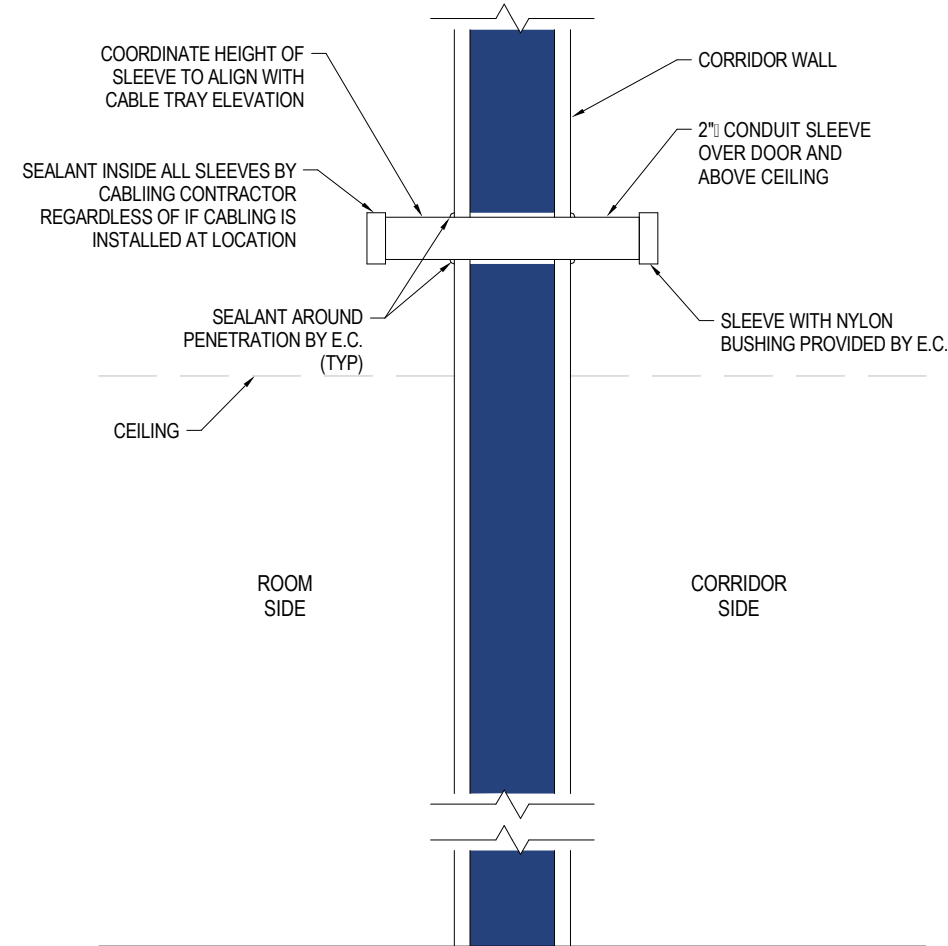
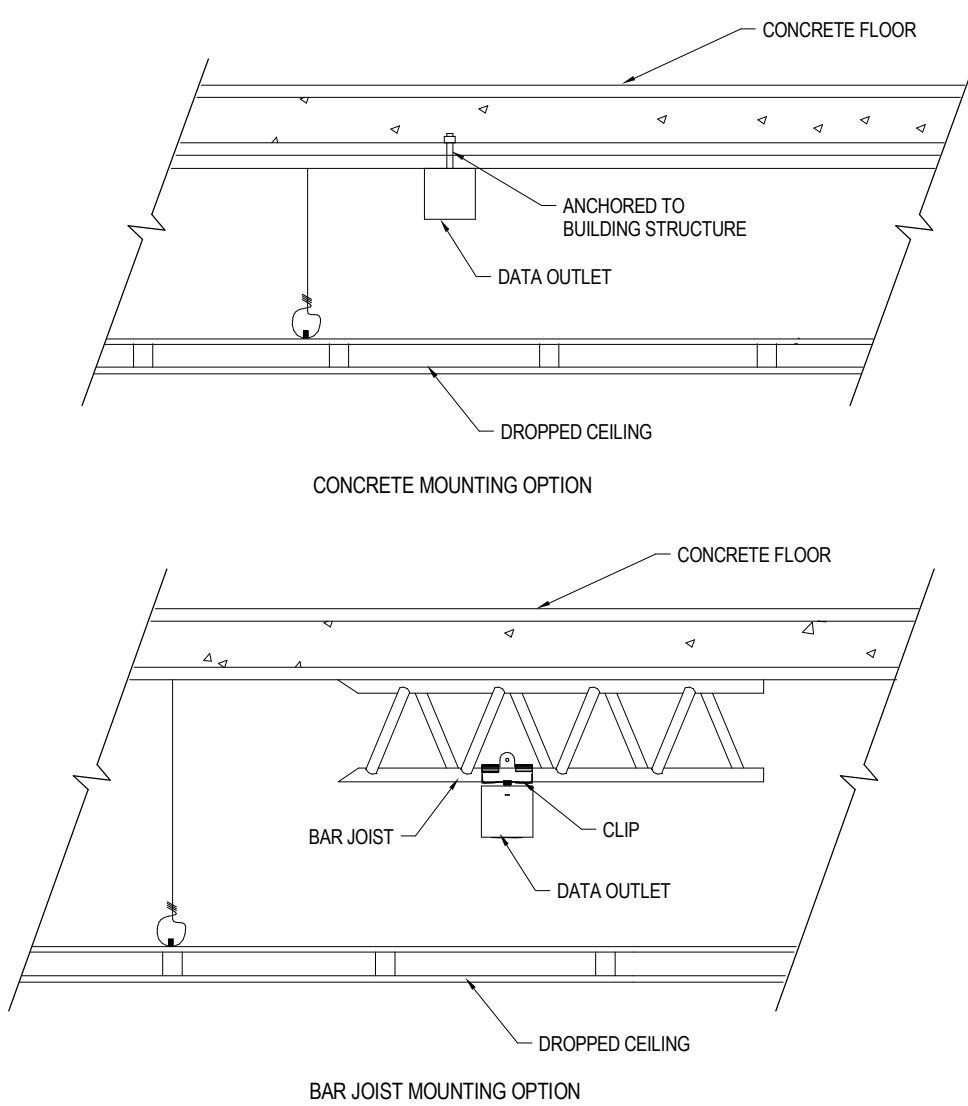
**GROUNDING & BONDING RISER DETAIL NOTES**

- BONDING CONDUCTOR FOR TELECOMMUNICATIONS (BCT) TO BUILDING GROUNDING ELECTRODE. BCT SHALL NOT BE SMALLER THEN THE TBB.
- BCT TO NEAREST BUILDING STEEL STRUCTURE. IF APPLICABLE UTILIZED EXOTHERMIC WELDING CONNECTION TO BUILDING STEEL.
- TELECOMMUNICATIONS BONDING BACKBONE (TBB) FOR GROUNDING EQUALIZER (GE), IF APPLICABLE.
- TYPICAL TBB(S) THAT INTERCONNECTS ALL TGB(S) WITH THE TMGB.
- BCT TO TELECOMMUNICATIONS CABLE RUNWAYS(S), RACK(S), CABINET(S) AND APPLICABLE EQUIPMENT. DAISY CHAINING OF BCT AT RELAY RACKS IS NOT ACCEPTABLE. EACH RACK IS TO HAVE A BCT TO A COMPRESSION LUG TAP TO DEDICATED HOMERUN ACT BACK TO THE TGB. SEE DETAILS.

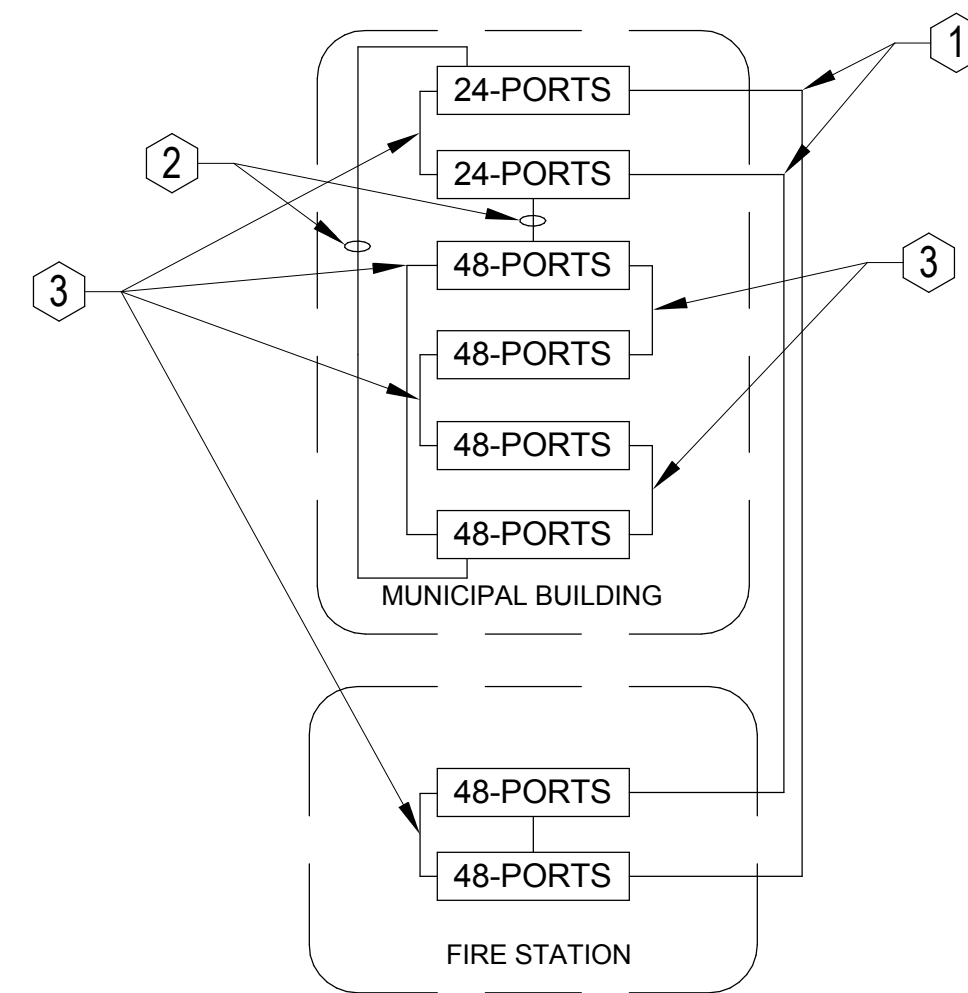
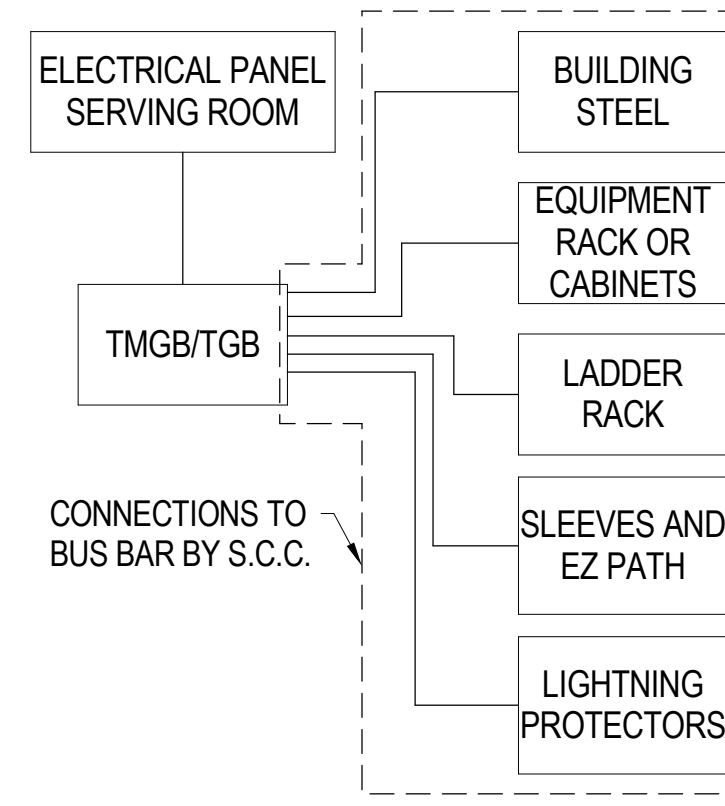


**1** GROUNDING AND BONDING DETAIL  
SCALE: NS

**2** TYPICAL GROUNDING FLOW DIAGRAM  
SCALE: NS



NOTES:  
COORDINATE FLOOR BOX LID OPTION TO MATCH FLOORING TYPE.  
FLOOR BOXES AND ELECTRICAL SERVICE PROVIDED BY E.C.  
DATA CONTRACTOR TO PROVIDE DATA PLATE.  
CONDUITS TO FLOOR BOX SHALL NOT BE CAST IN THE SLAB.



**3** ABOVE CEILING TERMINATION DETAIL  
SCALE: NS

**4** TYPICAL CABLING SLEEVE  
SCALE: NTS

**5** RECESSED FLOOR BOX WIREMOLD RFB11-OG  
SCALE: NS

**6** TELECOM ROOM BONDING DIAGRAM  
SCALE: NS

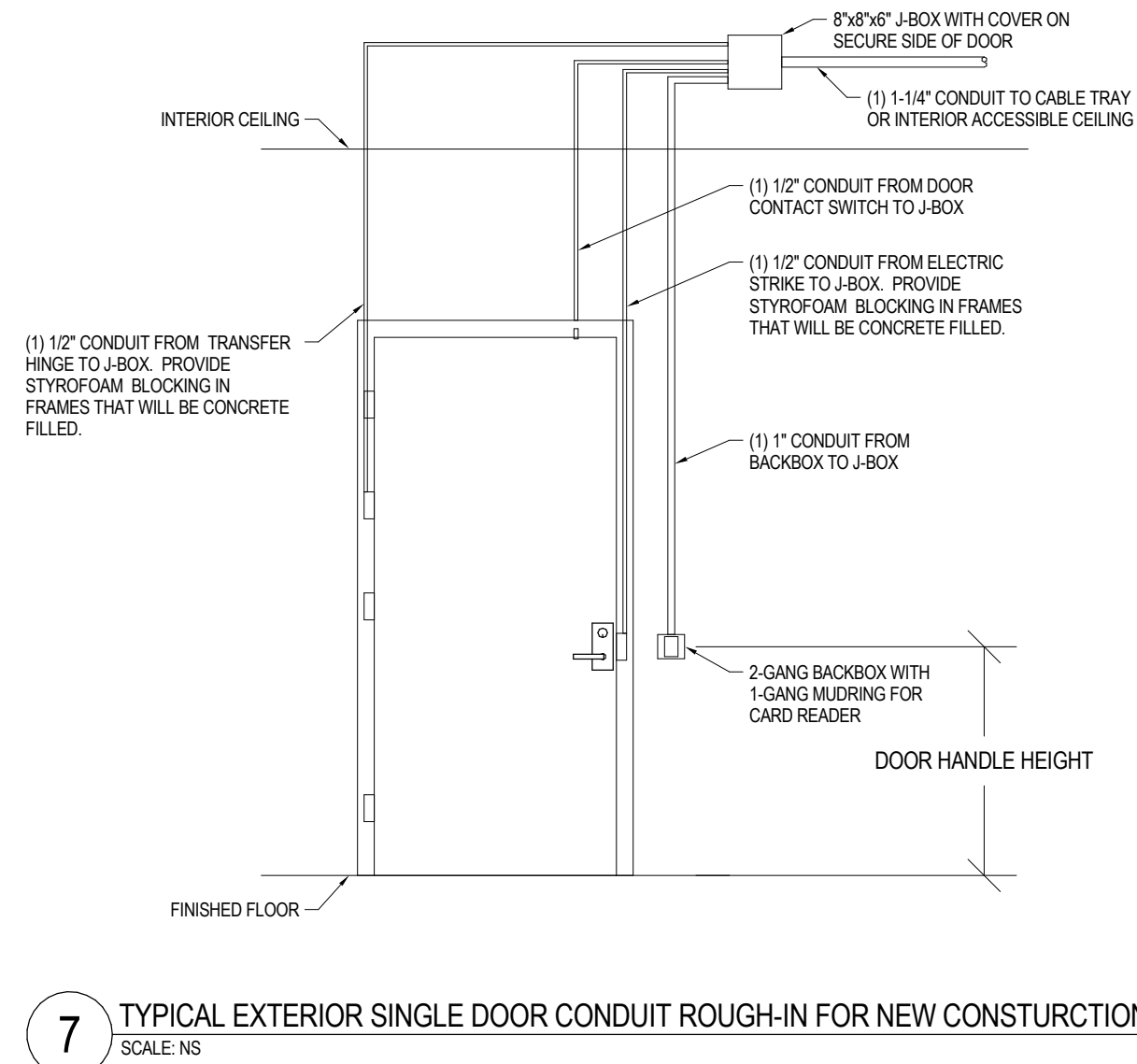
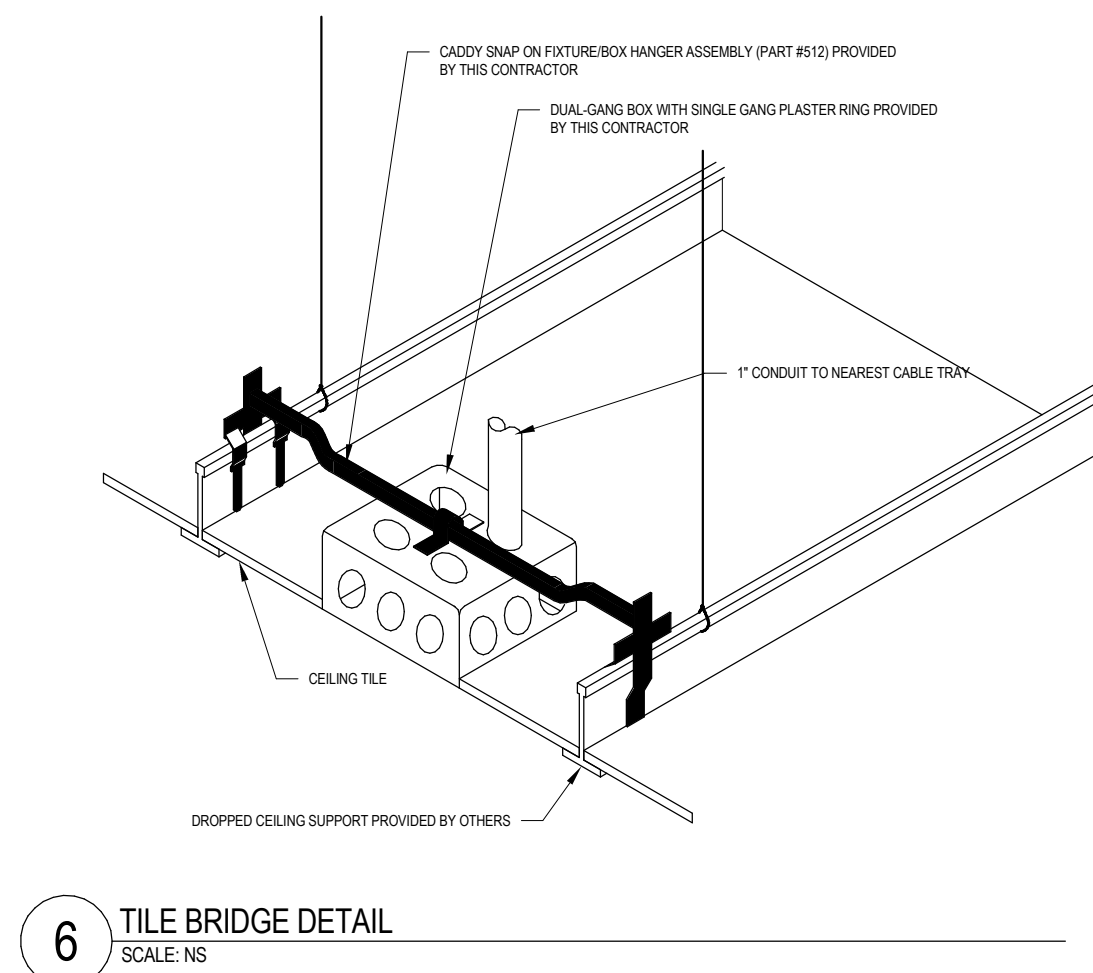
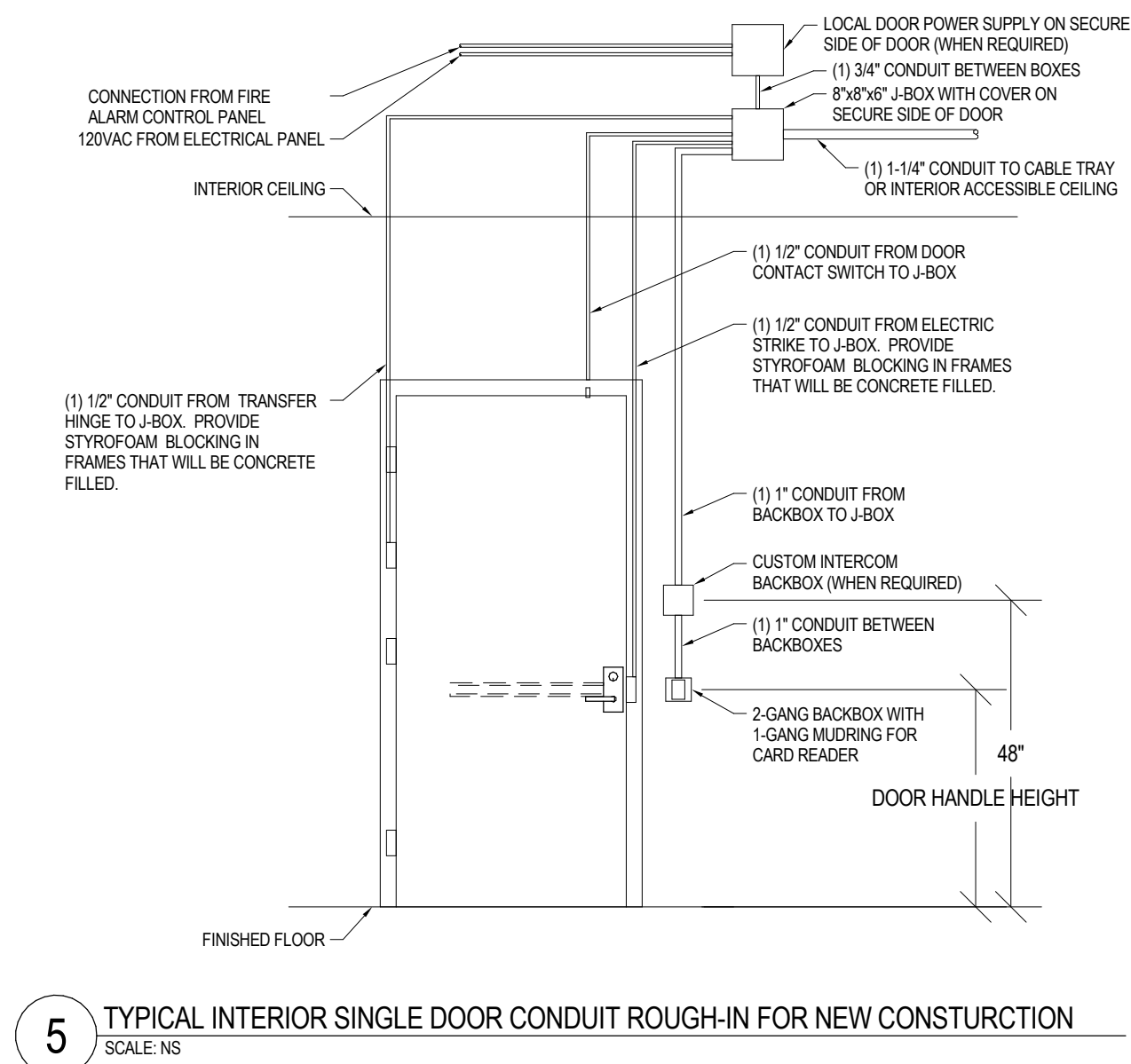
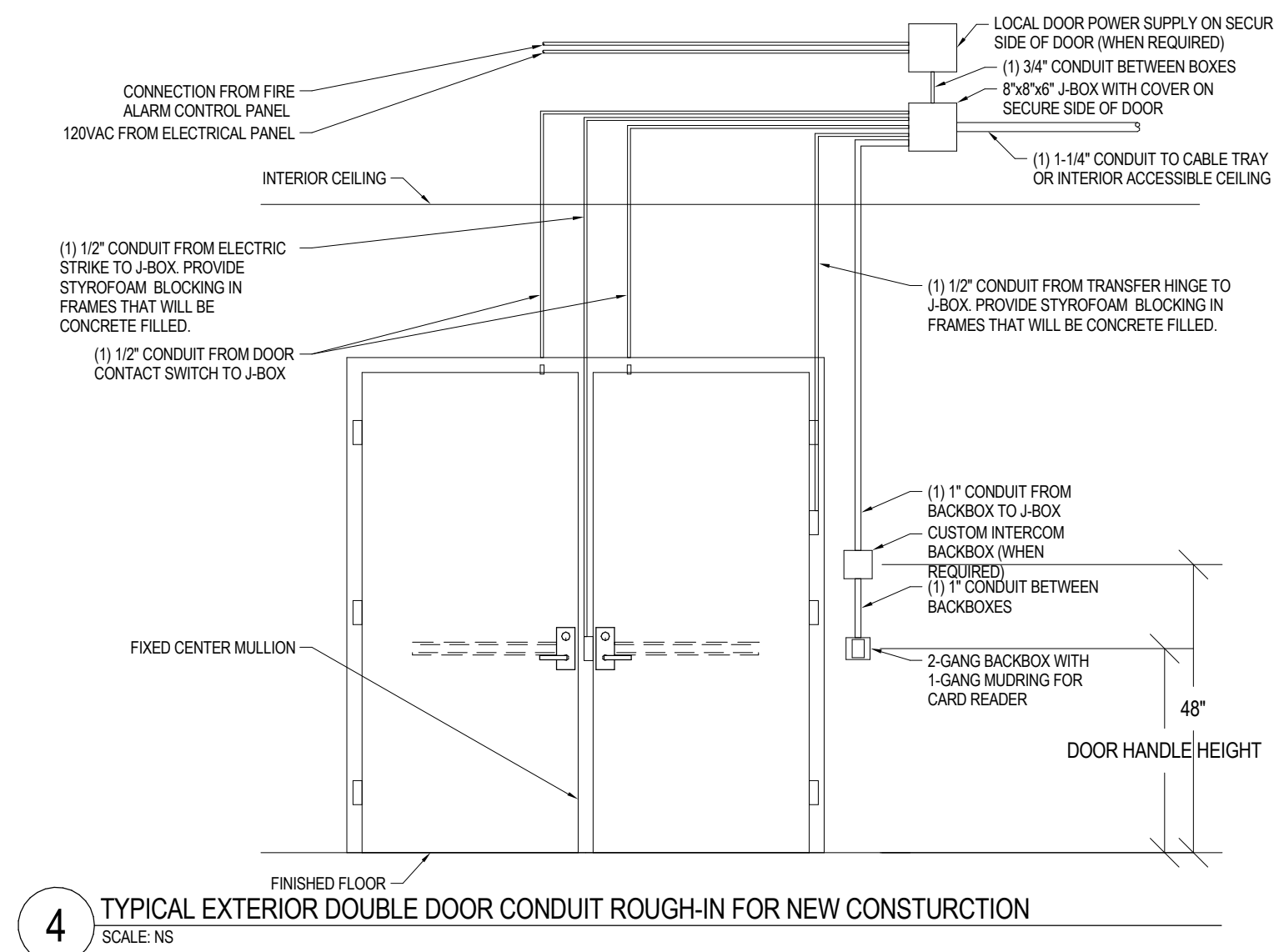
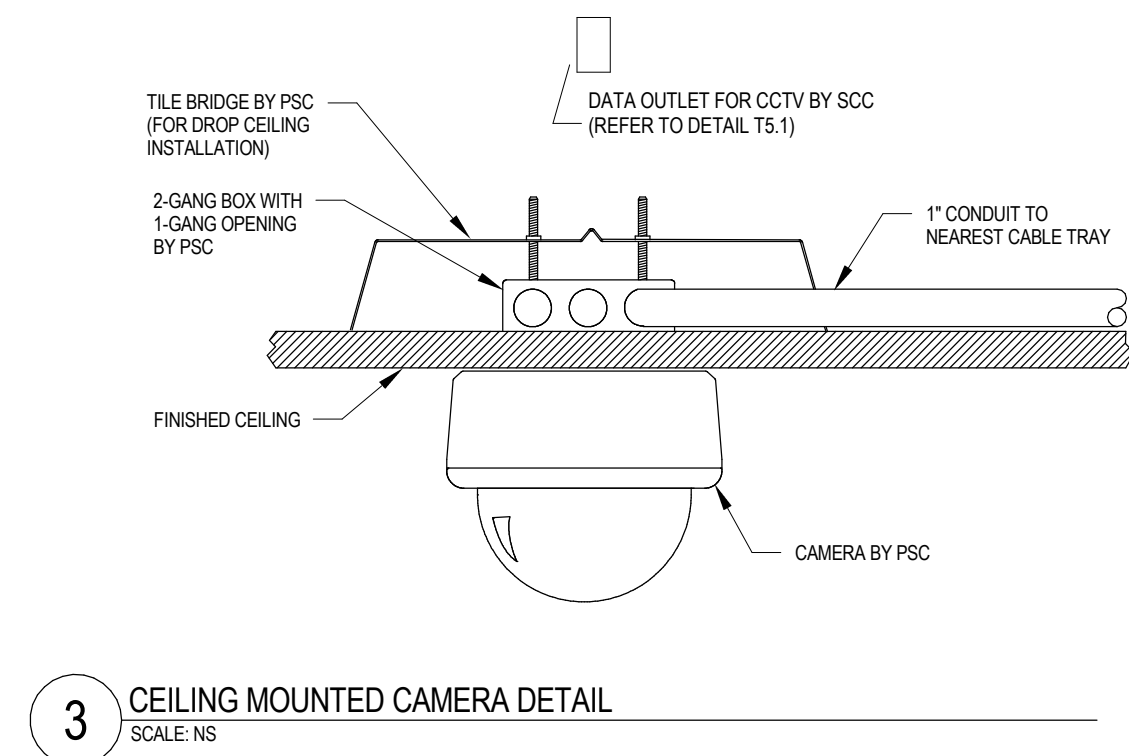
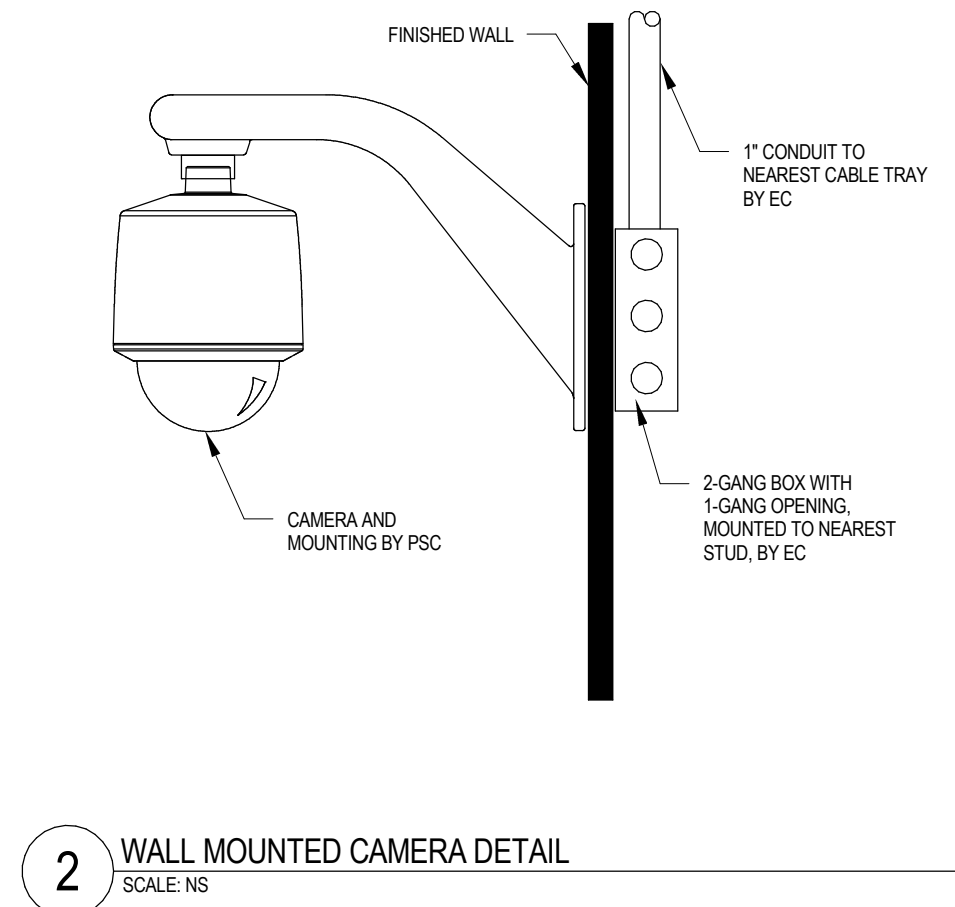
**7** LAN DIAGRAM  
SCALE: NS

- 1 GIGABIT OVER SINGLE-MODE FIBER
- 2 1 GIGABIT OVER SINGLE-MODE FIBER
- 3 STACKING CABLE



1. REFER TO SECURITY SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

- 
- EXTERIOR WALL
- INTERIOR WALL
- DATA CONNECTION TERMINATED IN SINGLE GANG METALLIC BOX WITH A STAINLESS STEEL FACEPLATE
- PATCH CABLE TO EXTERIOR CAMERA
- 3" SLOPED CONDUIT THRU EXTERIOR WALL INTO BACKBOX (ANCHORED TO STRUCTURE)
- INTERIOR CEILING
- CAMERA AND MOUNTING BY PSC
- 1 WALL MOUNTED CAMERA DETAIL
- SCALE: NTS



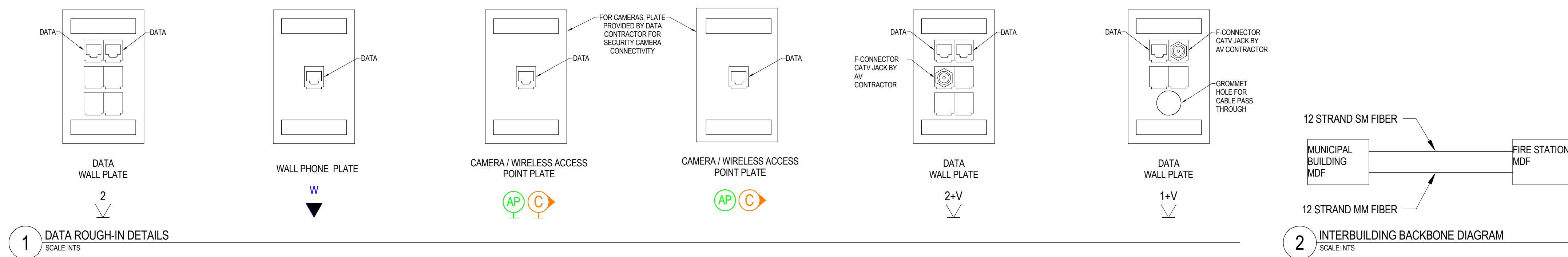
Camera #	Camera Type	Mounting Structure	Location	View	Corridor View Mode
01	C10	Exterior Wall	By Workout Area A138	Activity across outside of building	
02	C10	Exterior Wall	By Wash/Dry A135	Activity across outside of building	
03	C6	Exterior Wall	By Fire Riser A134A	Activity across outside of building	
04	C2	Drop Ceiling	Entry A100	Faces of people entering building	
05	C3	Exterior Wall	Portico A140	Faces and activity in portico	
06	C10	Exterior Wall	Outdoor Cooking Area A141X	Activity across outside of building	
07	C6	Exterior Wall	By Dorm A118	Activity across outside of building	

8 CAMERA SCHEDULE  
SCALE: NS

Camera Type	Manufacturer	Part #	General Description
C1	Axis	P3364-V W/3.3-12mm Lens	Typical interior camera, 1.3mp
C1W	Axis	P3364-V W/2.5-6mm Lens	Typical interior camera, 1.3mp, wide angle lens, low light
C2	Axis	P3384-V	Interior camera, 1.3mp with WDR for exterior window or door within its FoV
C3	Axis	P3384-VE	Typical Exterior, 1.4mp WDR camera covering small areas like door entries
C4	Axis	P3367-V	High res, 5mp interior camera
C5	Axis	P3367-VE	High res, 5mp exterior camera covering large areas like parking lots or license plate recognition
C6	Arecont	AV8185DN-HB	Typical exterior 180 camera, 8mp for smaller outdoor areas
C7	Arecont	AV8365DN	Typical interior 360 camera, 8mp for 3-way corridors and similar areas
C8	Arecont	AV12186DN	Interior 180 camera, 12mp WDR for bright areas
C9	Arecont	AV20185DN	High res, 20mp 180 camera for gyms, cafeterias and other large areas
C10	Arecont	AV20185DN-HB	High res, weather resistant 20mp 180 camera for large exterior areas
C11	Arecont	AV20365DN-HB	High res, weather resistant 20mp 360 camera for parking lots
C12	Axis	EQ6035-E	Medium res, weather resistant 2mp PTZ camera
C13	Axis	Q7401	Camera encoder for existing PTZ cameras to be encoded at 30fps at D1 resolution

9 CAMERA TYPE SCHEDULE  
SCALE: NS

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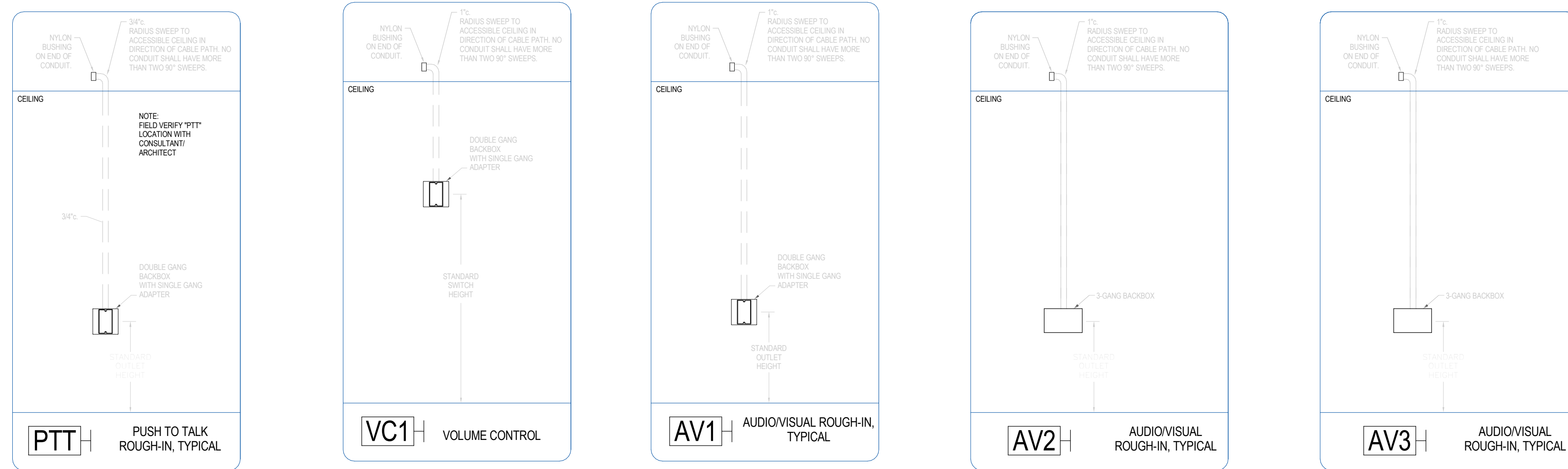
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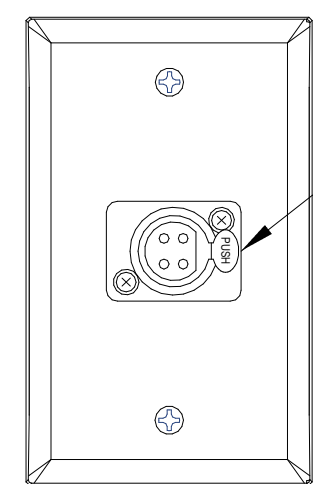
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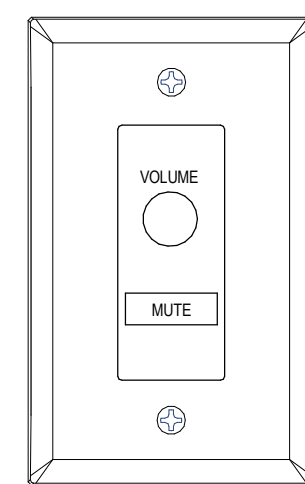
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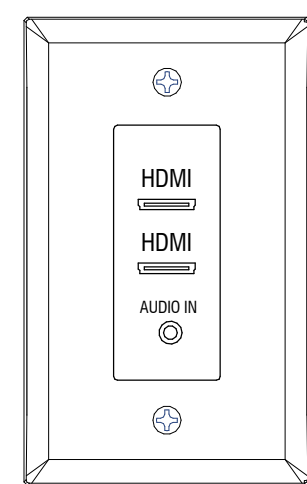
ELECTRICAL ROUGH-IN PROVIDED BY THE ELECTRICAL CONTRACTOR ABOVE  
AUDIO/VIDEO DEVICES AND PLATES BELOW SHALL BE PROVIDED BY THE AV-TECHNOLOGY CONTRACTOR BY OTHERS UNDER SEPARATE CONTRACT



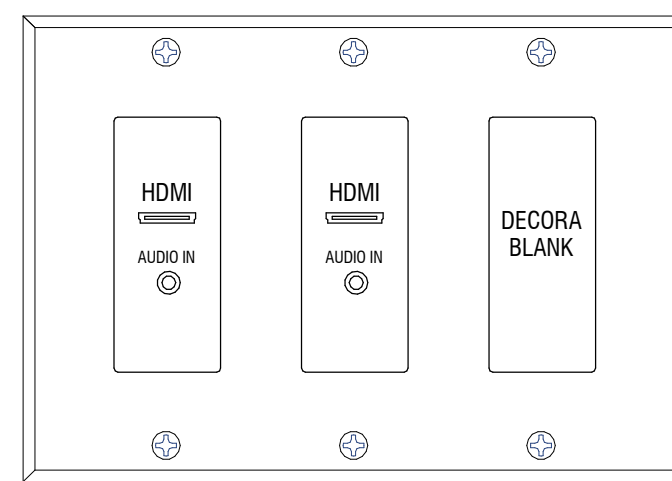
1 PUSH TO TALK MICROPHONE AND INTERCOM PLATE  
SCALE: NTS



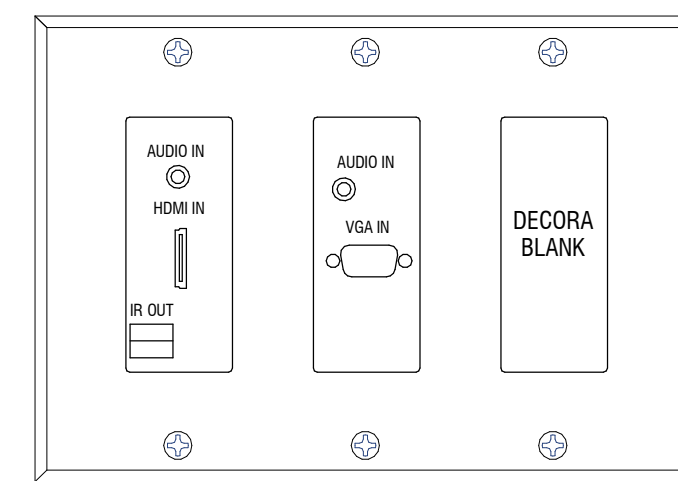
2 VC1 PLATE  
SCALE: NTS



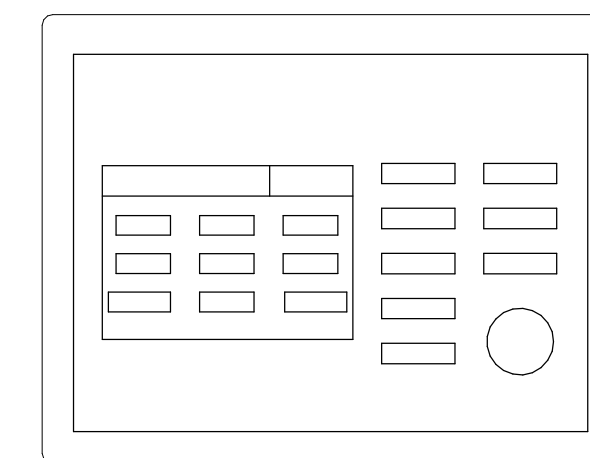
3 AV1 PLATE  
SCALE: NTS



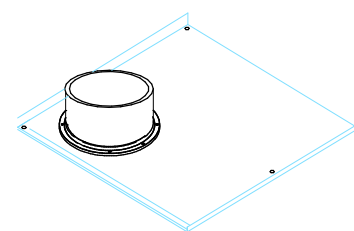
4 AV2 PLATE  
SCALE: NTS



5 AV3 PLATE  
SCALE: NTS



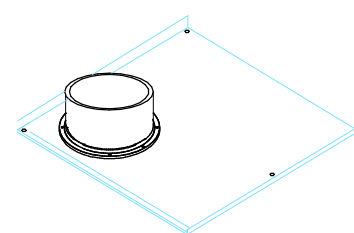
6 "TCP" EXTRON TLP=PRO-320M  
SCALE: NTS



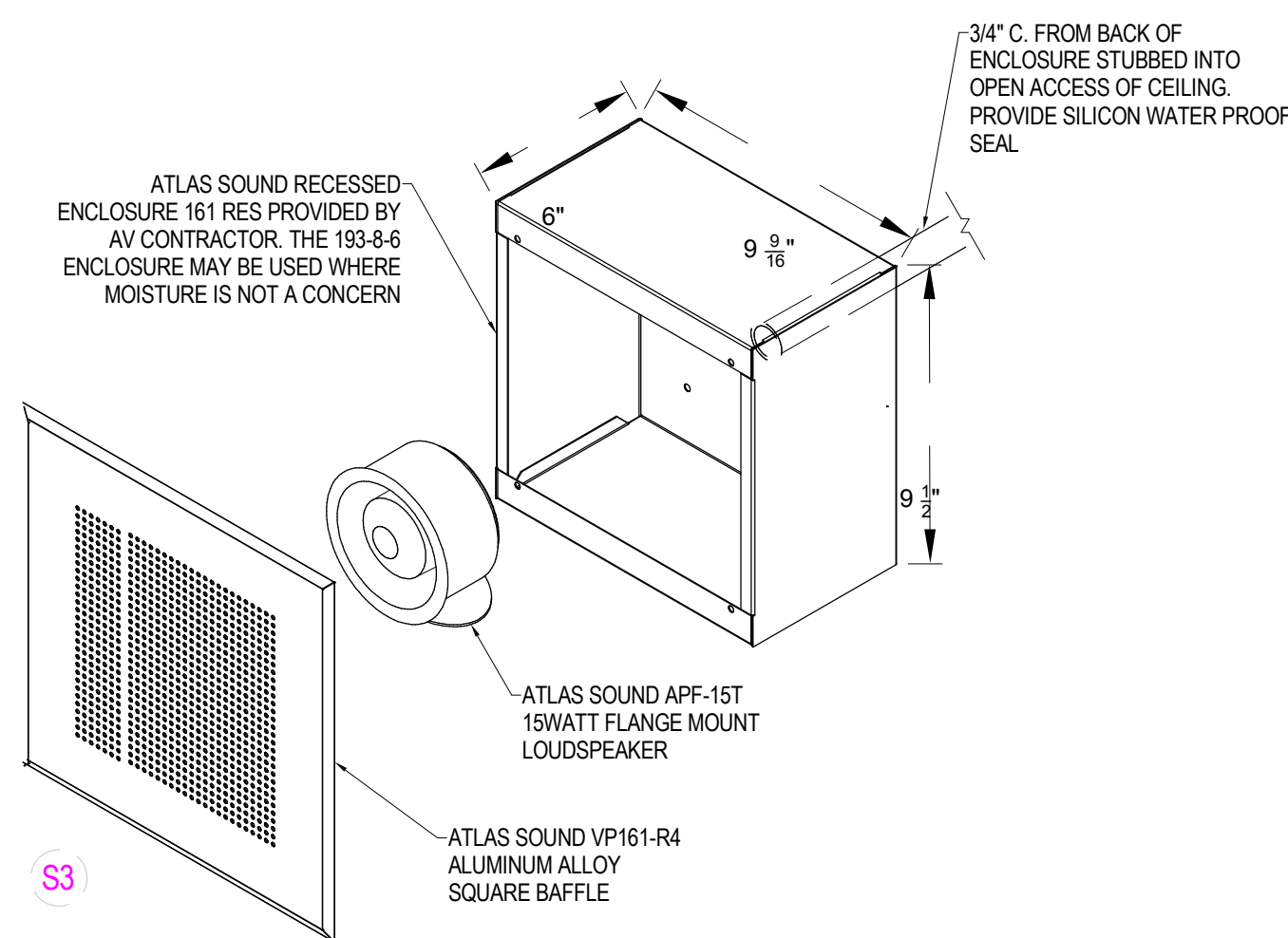
OR

LOWELL LT2-830-72-BB DROP CEILING  
LOUDSPEAKER

**"S1" LOUDSPEAKER, DROP CEILING**  
SCALE: NTS



**8** "S2" LOUDSPEAKER, DROP CEILING  
SCALE: NTS

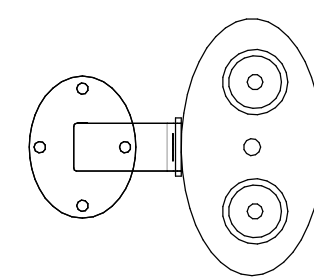


**S3** ALUMINUM ALLOY SQUARE BAFFLE

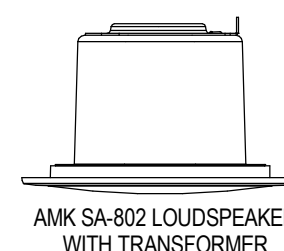
**9** "S3" SPEAKER, EXTERIOR WALL

SCALE: NTS

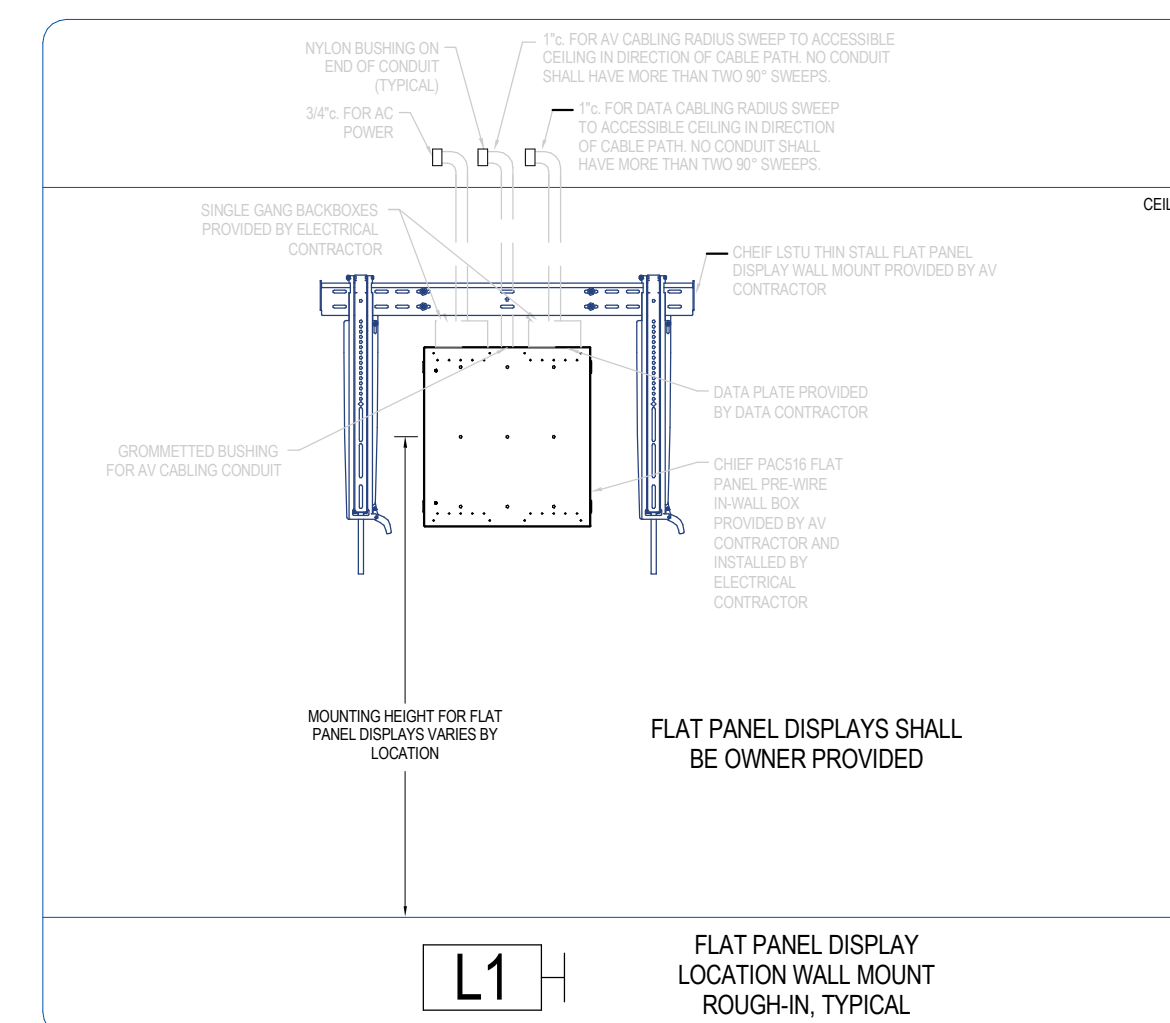
NOTE:  
COORDINATE FINAL HEIGHT AND LOCATION WITH ARCHITECT. RE-  
SPEAKER ENCLOSURE INTO EXTERIOR WALL OR RECESS IN SOF-  
COORDINATE WITH TILT-UP CONCRETE WALL PANELS.



10 "S4" LOUDSPEAKER, INTERIOR WALL  
SCALE: NTS



11 "S5" LOUDSPEAKER, HARD CEILING  
SCALE: NTS

[illegible]

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## TECHNOLOGY - DETAILS

## T5.4



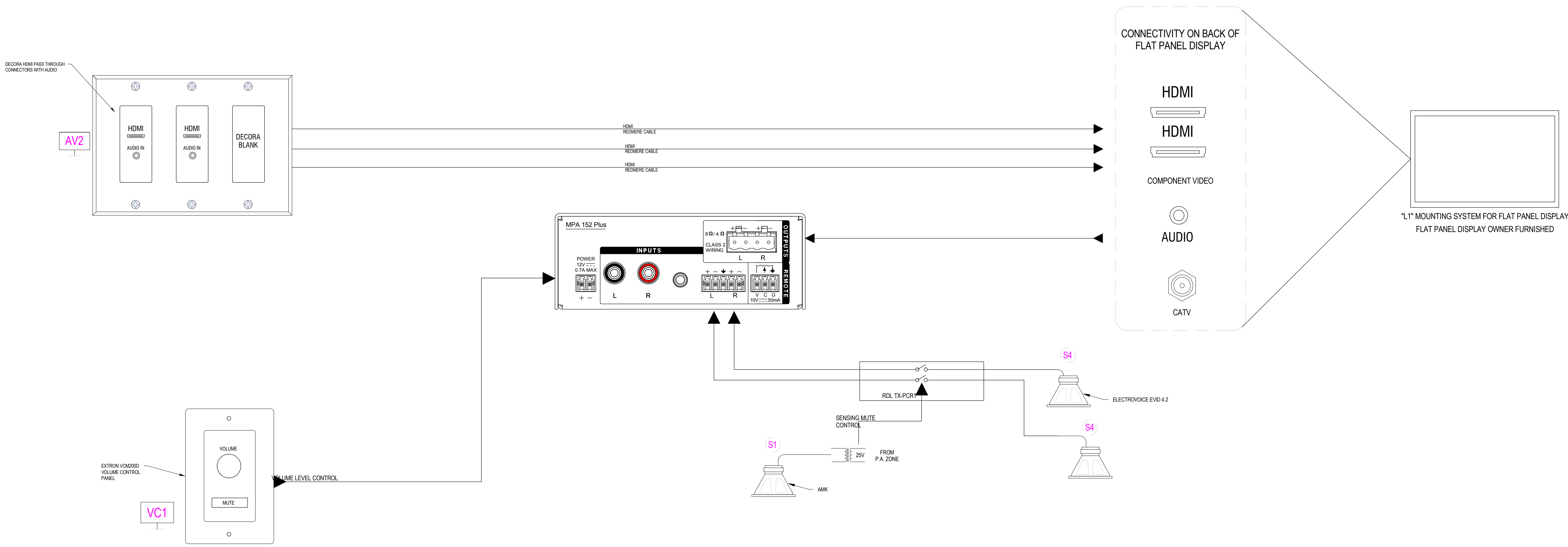
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**TECHNOLOGY -  
DETAILS**

**T5.5**



**1** TYPICAL FOR DINING/DAY ROOM A113 SYSTEMS  
SCALE: NTS

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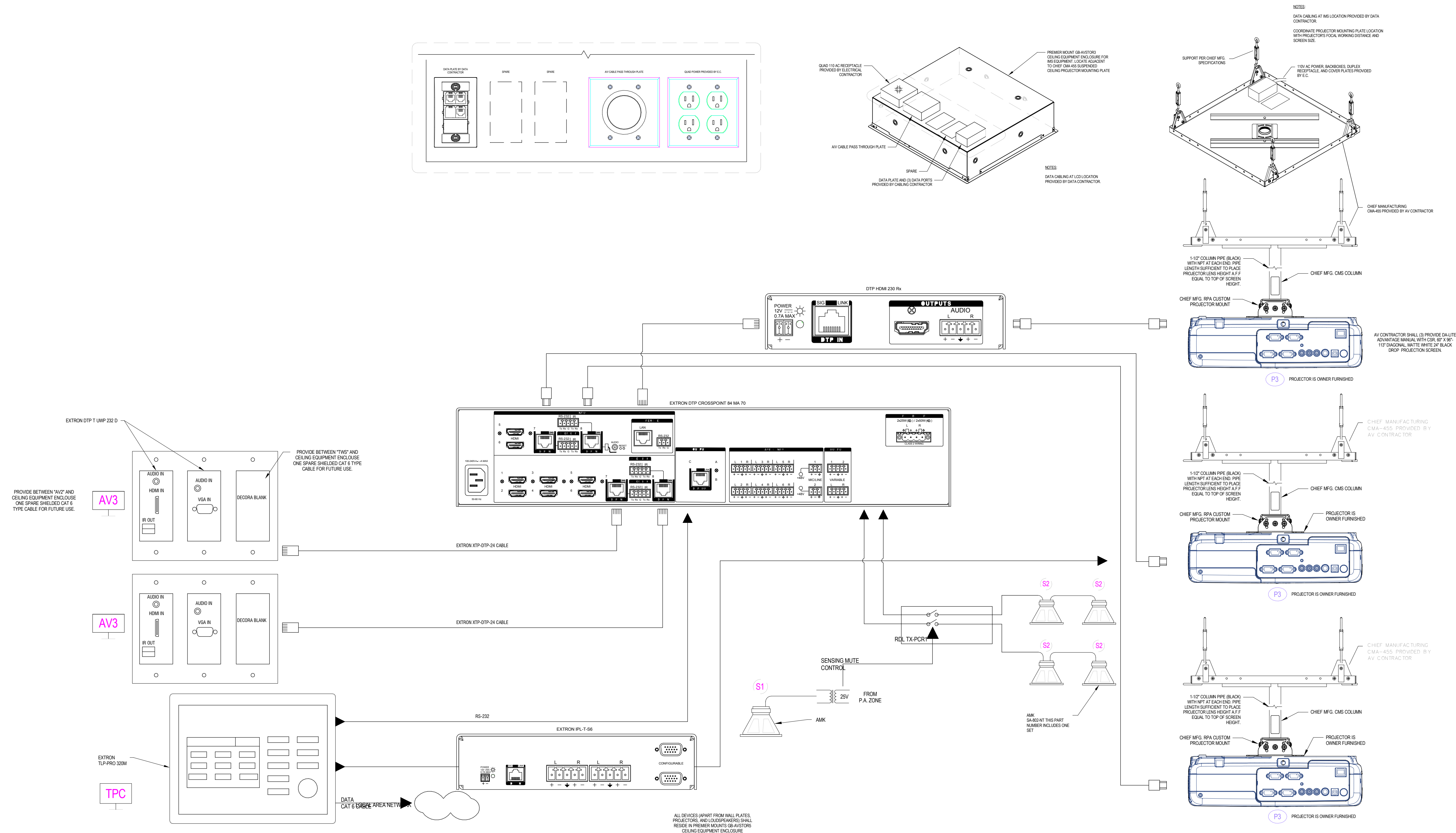
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**TECHNOLOGY -  
DETAILS**

**T5.6**

**1** TYPICAL OF TRAINING ROOM 108 AV SYSTEM  
SCALE: NTS





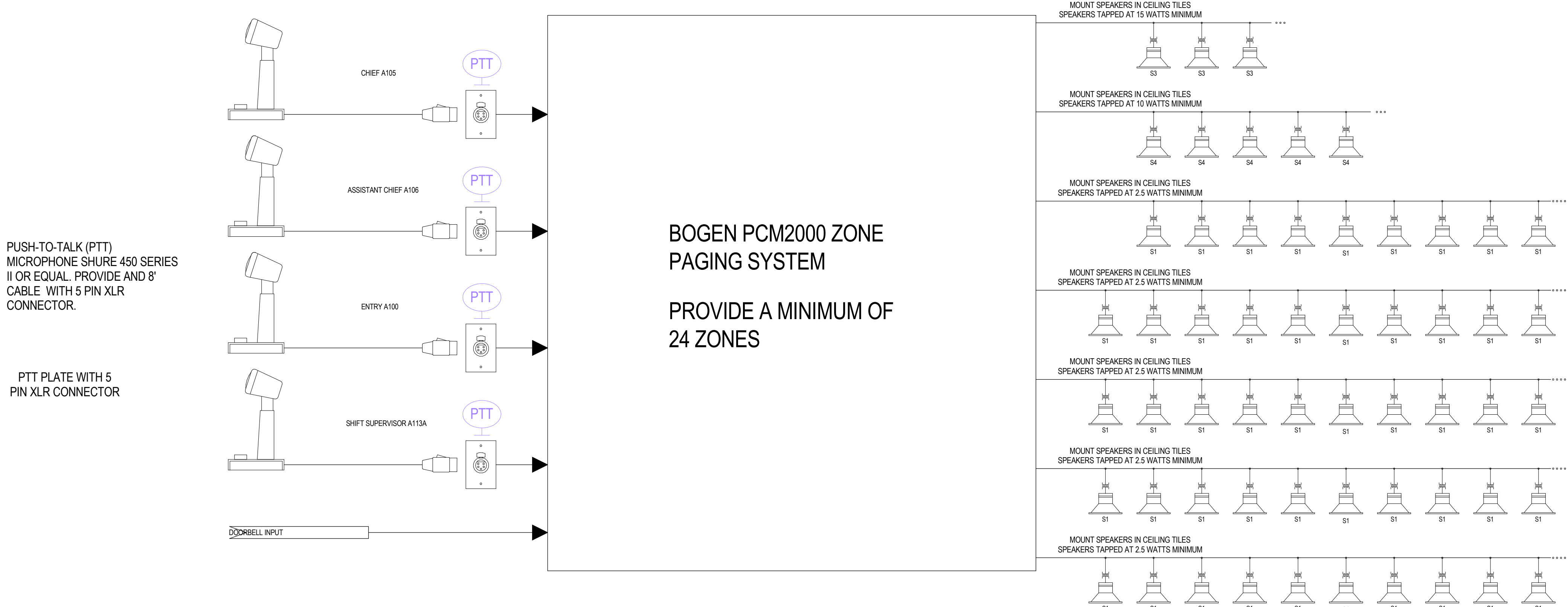
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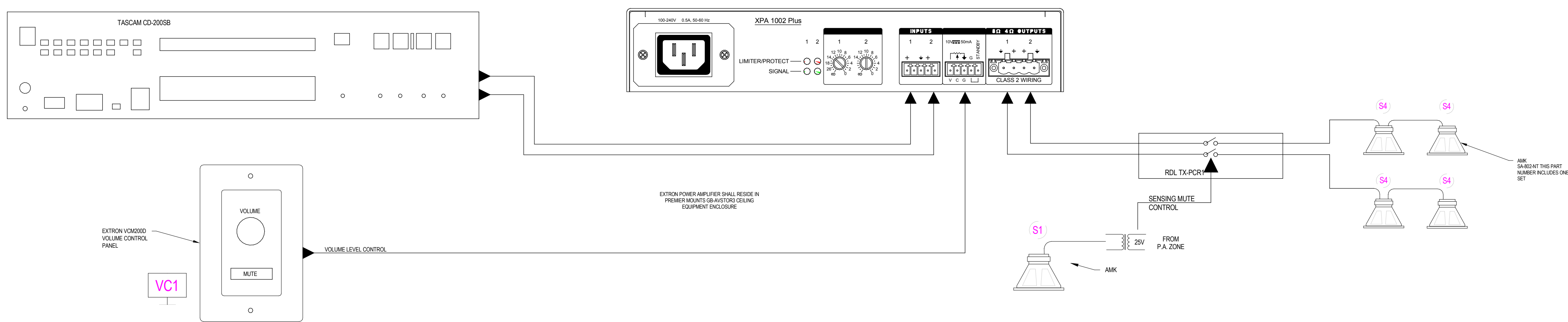
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TECHNOLOGY -  
DETAILS

**T5.7**



**1** TYPICAL OF FIRE STATION OVERHEAD PAGING SYSTEM  
SCALE: NTS



**2** TYPICAL SOUND SYSTEM FOR WORKOUT AREA A138  
SCALE: NTS